

## CLAIMS

1. A method for displaying genotype information associated with probe array experiments, comprising the acts of:
  - 5 receiving one or more sets of emission intensity data, wherein each set of emission intensity data includes a plurality of emission intensity values each associated with a probe disposed upon a probe array;
  - generating a plurality of genotype calls, wherein each of the genotype calls is based, at least in part, upon one or more of the emission intensity values;
  - 10 assembling the plurality of genotype calls into one or more genotype data sets; and
  - displaying each of the one or more genotype data sets in one or more panes of a graphical user interface.
- 15 2. The method of claim 1, wherein:
  - each of the plurality of emission intensity values corresponds to detected emissions from a scanned probe array.
- 20 3. The method of claim 1, wherein:
  - the probe includes a genotyping probe.
4. The method of claim 3, wherein:
  - the genotyping probe includes a sequencing probe.
- 25 5. The method of claim 3, wherein:
  - the genotyping probe includes a SNP probe.
6. The method of claim 1, wherein:
  - the genotype call is an A, G, C, T, or (n) call.
- 30 7. The method of claim 1, wherein:
  - the genotype call includes a SNP call.
8. The method of claim 1, wherein:
  - the one or more panes includes a tabular format
- 35 9. The method of claim 1, wherein:
  - the one or more panes includes a graphical format.
- 40 10. The method of claim 8, wherein:
  - the graphical format includes a representation of relative SNP call quality.
11. The method of claim 8, wherein:
  - the graphical format includes the plurality of genotype calls associated with a representation of a sequence.

12. The method of claim 8, wherein:  
the graphical format includes a representation of probe intensity.
13. The method of claim 1, further comprising the acts of:  
5 retrieving annotation information in response to a user selection of one or more of the displayed genotype calls; and  
displaying the annotation information in one or more panes of the graphical user interface.
- 10 14. A system for displaying genotype information associated with probe array experiments, comprising:  
a sequence data manager constructed and arranged to receive one or more sets of emission intensity data, wherein each set of emission intensity data includes a plurality of emission intensity values each associated with a probe disposed upon a probe array;  
15 a genotype call generator constructed and arranged to generate a plurality of genotype calls, wherein each of the genotype calls is based, at least in part, upon one or more of the emission intensity values;  
a data assembler constructed and arranged to assemble the plurality of genotype calls into one or more genotype data sets; and  
20 an output manager constructed and arranged to display each of the one or more genotype data sets in one or more panes of a graphical user interface.
15. The system of claim 14, wherein:  
each of the plurality of emission intensity values corresponds to detected  
25 emissions from a scanned probe array.
16. The system of claim 14, wherein:  
the probe includes a genotyping probe.
- 30 17. The system of claim 16, wherein:  
the genotyping probe includes a sequencing probe.
18. The system of claim 16, wherein:  
the genotyping probe includes a SNP probe.
- 35 19. The system of claim 14, wherein:  
the genotype call is an A, G, C, T, or (n) call.
20. The system of claim 14, wherein:  
40 the genotype call includes a SNP call.
21. The system of claim 14, wherein:  
the one or more panes includes a tabular format
- 45 22. The system of claim 14, wherein:  
the one or more panes includes a graphical format.

23. The system of claim 22, wherein:  
the graphical format includes a representation of relative SNP call quality.
- 5 24. The system of claim 22, wherein:  
the graphical format includes the plurality of genotype calls associated with a  
representation of a sequence.
- 10 25. The system of claim 22, wherein:  
the graphical format includes a representation of probe intensity.
- 15 26. The system of claim 14, wherein:  
the output manager is further constructed and arranged to retrieve annotation  
information in response to a user selection of one or more of the displayed genotype calls,  
and display the annotation information in one or more panes of the graphical user  
interface.
- 20 27. A computer system for displaying genotype information associated with probe  
array experiments, comprising:  
a user computer having system memory with executable code stored thereon,  
wherein the executable code is constructed and arranged to perform the acts of;  
receiving one or more sets of emission intensity data, wherein each set of  
emission intensity data includes a plurality of emission intensity values each associated  
with a probe disposed upon a probe array;
- 25 generating a plurality of genotype calls, wherein each of the genotype calls  
is based, at least in part, upon one or more of the emission intensity values;  
assembling the plurality of genotype calls into one or more genotype data  
sets; and
- 30 displaying each of the one or more genotype data sets in one or more  
panes of a graphical user interface.